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LECTURE.

PRACTICAL VALUE OF THE KNOWLEDGE OF PATHOGENY.¹

BY PROFESSOR BOUCHARD,

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Gentlemen: To know why we do a certain thing, and what we do, is very rare knowledge, and for the physician it is a new thing. Medicine, as the other sciences which are practically applied, necessitates directing ideas for its intervention. Before the laws of resistance had been established by the science of mechanics, architects studied the old and most ancient monuments, which had resisted the trying influence of time, and then applied to new buildings the methods of construction which had preserved from destruction the works of the

¹ Delivered at the Paris Medical School.

past, the excellence of which was in that manner empirically demonstrated.

Medicine has not overlooked empiricism; formulas have been compiled and adopted without knowing how the remedies act, but only on account of the observations of past centuries which have recommended them for the cure of certain diseases. This empirical therapeutics, however, did not prevent the physician from acquainting himself, following the example of Hippocrates, with the processes of Nature's medication; he ignored, however, the real cause of the cures, knowing only by external manifestations, which usually preceded the cure, that this naturalistic medication would relieve and help the symptoms. The particular indications were also not neglected, and the physician fought against the dangerous symptoms—pain, fever, and even insomnia. This is the therapeutics of symptoms and accidents; this is the palliative therapeutics which, some forty years ago, took up the name of physiological therapeutics and is still to-day in great favor.

I have always spoken in a respectful way

of palliative or physiological therapeutics, which I use to-day, when I cannot do better; but I should like those who use this method exclusively to speak of it with modesty. I admit that this method of therapeutics oftentimes relieves and even sometimes prevents death; this happens when, in a case of cardiac asystoly, the heart is stimulated to more energetic and regular contractions; and when, in a case of left pleurisy, the dangerous pressure upon the heart is suppressed by aspiration; but while to evacuate what is found in the pleura might sometimes prevent a man from dying, yet it will not cure his pleurisy.

Using the physiological method a high elevation of temperature might be prevented from becoming dangerous or the pain from becoming unbearable; intervention may be useful, may be satisfying to the suffering man, but it will not cure him; and the morbid process will continue its work, overlooking your intervention, and according to its natural laws proceed toward cure or toward death. If the patient recovers, he owes it to himself; nature has furnished the material for his cure.

Oftentimes the physician has very much contributed to the cure; he has attacked the cause of the disease, has interfered with the pathogenic process; he has very often done it unconsciously, the means having been furnished by empiricism. To the latter we owe the knowledge of administering quinine in intermittent fever, mercury in syphilis, the salicylates in acute rheumatism; these are precious acquisitions, which must not be overlooked to show that empiricism has done good. We are beginning to find out their mode of action, of some of them, and gradually they will be classified in the pathogenic therapeutics, of which method I said, ten years ago, that to it belonged the future.

In diseases the pathogeny of which is partly known pathogenic therapeutics pursues its researches in a logical direction, finding out what is better than drugs, the methods of treatment. Empiricism had given to it mercury, while pathogenic therapeutics has discovered its antiseptic property, and at once, more than a hundred antiseptic drugs. My excellent master, M. Charcot, said twenty-three years ago: "it is necessary for the physician to think anatomically"; one of his students said, some twelve years ago: "the physician must learn to think physiologically." These two precepts are excellent and one can say that Laennec, Cruveilhier, and Claude Ber-

nard had prepared physicians to accept those precepts.

It is certainly useful that the physician should accustom himself to have, so to say, an internal view of the state of the parts in which the pathological process is going on. It is also necessary that he should be able to comprehend what interferes with the natural function of the part, and of the physiological disturbances produced by it in the other organs. But it is much more useful for the clinician and for the pathologist that they should accustom their minds to search the reasons why and how these lesions arise, why and how they persist or increase, and how they disappear. For the past ten years, I have always recommended that the physician should think pathogenically. What distinguishes scientifically medicine from natural history is this pathogenic point of view.

It is this which practically can enable one to apply curative therapeutics with some appearance of logic. This is a new view in medicine, and I shall surprise nobody when I say that a number of our professional brethren have never been embarrassed or preoccupied by it, having never employed it. This is because pathogeny is a new science. I must say, however, that in all the past life of medicine, physicians have always tried to find out the mode of action of causes and deduce from this knowledge a rational therapeutics; but they had false conceptions and made wrong deductions.

Only some thirty years ago has medicine slowly engaged itself in this pathogenic path, and pathogeny begins to-day to become beneficial to therapeutics by its discoveries. If we consider that Hippocrates was the heir of what he himself called "Ancient medicine," and that since his time more than two thousand years have been necessary to establish the nosology, to know what diseases are, by what lesions they are characterized, what symptoms reveal them, one is entitled to think that ever so many years will be necessary to know how diseases are produced, to penetrate into their intimate nature, to establish their pathogeny; and we might fear that thousands of years still separate us from the moment when we shall be able rationally to institute a pathogenic therapeutics. This would be true if each disease had a special pathogeny; but if the morbid causes are not numerous, then the number of pathogenic processes is limited. For the past ten years I have repeated and demonstrated that there are only four pathogenic processes. Certain diseases are the result of a previous interfer-

ence in the nutrition. Life can vary in quality and in intensity without stepping out of the physiological state. There are certain men in whom the cells elaborating the organic matter push this function to its extremest degree of destruction or oxidation, transforming the organic matter into water, carbonic acid, urea, etc. This perfection is however the exception, and is nearer to disease than to health. There are other men, and these constitute the majority, who, besides those perfect products, elaborate in a variable quantity incompletely transformed materials—such as uric acid, oxalic acid, the other organic acids and, in particular, the volatile fatty acids, etc.; this does not constitute and does not necessarily originate a disease. This imperfection of nutrition, which is the rule, brings on disease only when it is carried beyond certain limits. The quantity of transformed organic matter varies just as much as the different degrees of metamorphosis, even in a state of health.

One kilogramme of living human material can in twenty-four hours furnish one gramme (fifteen grains) of urea in the child; about forty centigrammes (six grains) in the adolescent; thirty centigrammes (four and a half grains) in the adult man; and twenty centigrammes (three grains) in the old man. In the same individual, not considering the age or the kind of feeding, many different conditions can influence the production of urea beyond or below the average daily quantity, without there being any cause or consequences capable of altering the state of health.

When we consider the intensity of nutrition only by the variations in quantity of one of the products of disassimilation, we observe that the physiological state is not allied to an invariable percentage of organic matter metamorphosis, but that it can exist when this matter is more or less completely transformed, or when this matter is more or less abundantly transformed. But there are certain limits of intensity and duration beyond which this deviation from the average nutritive type can bring about only a pathological state. I have demonstrated to you a type of these durable interferences with nutrition; they bring on diseases—such as biliary calculi, obesity, diabetes, gout, etc.—which are apparently different but the parentage of which has been established by clinical observations.

The physical, mechanical or chemical-morbid causes can involve, in a direct

manner, the cells of a circumscribed part or the cells of the whole organism, and produce in them—without there having been previously an interference in the nutrition (a disturbance of life) of their functions that group of diseases of which the traumatism and intoxications are the principal types, and which belong to a pathogenic process which I have designated under the name of "primitive cellular dystrophy." This is the simplest pathogenic process, but it is the least known and the most difficult one to study.

The morbid causes can also disturb the nutrition and the cellular function in an organ, in an apparatus, in the whole body, by an indirect action, using the intervention of the nervous system, and producing those diseases of nervous reaction to which I have devoted one year of my teaching.

Finally, infection constitutes the fourth pathogenic process, the knowledge of which is the most recent. This classification of the different ways in which diseases are produced you hear me refer to every year; I repeat it again to-day, for I am convinced that it is the expression of a just and prolific idea, which is not enough recognized. There is not a single disease the genesis of which does not recognize one of these processes, either isolated or in combination; the physician is therefore enabled to-day to think pathogenically.

Those who have a knowledge of pathogeny profit by it as well as their patients; this knowledge ought to be useful to others, but the generation of to-day does not familiarize itself with these notions; does not follow the oral lectures, but remains at home and makes their education by reading books which are still all built on an anatomical basis. Practitioners, although admitting the reality of the new doctrines, do not use them to direct their conduct.

Do the learned men of our profession derive all the benefit which is found in a knowledge of the pathogenic notions? I fear not, most of them only see one side of pathogeny, namely, infection. How many are they who take into consideration a morbid predisposition, diathesis or the premonitory interferences with nutrition? This enables us to see the most eminent masters in our profession use lithium for gout, or treat diabetes with the bromides. They do not comprehend that a remedy, which has a passing action, cannot, even if it has a momentary effect, overcome a chronic disease, which is chronic owing to a permanent vicious mode of life and which can only be

suppressed if life, that is, nutrition, is modified in a more durable form.

The surgeons of to-day protect wounds against *all* the microorganisms, to be more sure to prevent the influence of the pathogenic ones. If you treat in this manner, a wound in a diabetic patient, this wound will be cured by first intention; but at the same time, at some other part of the surface of the skin where no abrasion of the skin is to be found, will suddenly develop some formidable carbuncle. This is the result of the invasion at some portion of the subcutaneous system of the staphylococcus aureus, which, if it had only reached the surface of the wound, might only have produced a very slight suppuration. Many practitioners do not reflect on this point, others who think over it are discouraged; they do not see that in an infection, the infectious agent is not everything and that for its realization the interference of the organism is necessary; they overlook or forget that if the state of health is a safeguard against infection, certain deteriorations of health are favorable to the development of infectious agents and that there are nutritive changes which produce these deteriorations. They do not seem to know that the staphylococcus, which would not even produce the slightest reaction in a healthy man, will bring on pustules, boils and carbuncles in the diabetic patient. In the example I have just given, the wound has been carefully protected against the influence of the staphylococcus; and has united without suppuration; but the skin has not been protected everywhere, and the infectious agent, which resides everywhere around us, has penetrated into one of the follicles in which it has developed, having found a very favorable field for his development.

It is not the doctrine which is at fault in this case, but the physician who has failed to recognize the association between the two pathogenic processes, the premonitory disturbances of nutrition and then the infection; others are astonished when, during the convalescence of an acute abscess, they meet, owing to an exposure of the patient to cold, to fatigue, to a moral impression, with an unexpected complication, such as erysipelas. They know that it is not a new infection, but that the primitive infection extends itself beyond the at first circumscribed limit of organic reaction. They do not know, however, that the nervous action has modified the nutrition and rendered the organism favorable to the microbe, which

before the nervous shock had not been able to penetrate it deep enough. They accuse the doctrine of not explaining the clinical facts, because they have failed to associate the two pathogenic processes—the nervous reaction and the infection. To have a knowledge of infection constitutes progress; to see infection alone will prevent one from understanding many morbid processes. This scientific fault is detrimental not only to preventive or curative therapeutic, but also to prognosis and diagnosis.

If a fracture or a contusion have produced a large effusion of blood, and the skin is not injured so as to prevent the introduction of the infectious agent, a favorable prognosis will be given. But there are microbes in the intestines and you must not think that the epithelial layer is a great protection against them; they continually try to invade the organism, but the phagocytes prevent and destroy them after a short time. If, however, the life of the cells is suspended by the traumatic shock, the inhibitory action of which on nutrition has been demonstrated by the able experiments of M. Brown-Séquard, then phagocytism¹ is interfered with for some time, and as a result the microorganisms pass into the blood and

[¹ Phagocytism is a theory advanced by Professor Metschnikoff, of Odessa, which explains the fight between the organic cell and the microorganism. He asserts that there are certain cells in the organism, whose function it is to envelope, to digest, to eat up any bacteria which penetrate into the organism. This can be very well studied in the most simple form of organic matter, the amœba; but while this living matter employs this process of absorption and digestion of bacteria for its nutrition, in the higher organism, this same function of certain cells exists, with the object, however, of protecting the organism against the invasion of pathogenic microbes.

Metschnikoff has given the name *Phagocytes* to the cells which have the property of digesting microbes. He has divided them into two classes: first, the microphagous phagocytes, which are the migrating cells or leucocytes, found in all the tissues, but especially in lymphatics and blood organs. Second, the macrophagous phagocytes, which are the fixed cells of connective tissue, the endothelial cells of the lung, the cells of the spleen, of the marrow of bones, and all the cells which have a large nucleus.

Whenever a foreign body, living or dead, penetrates into the organism, there is an assembly, a meeting of phagocytes, of leucocytes. If the foreign body is small enough to be enveloped by the isolated cells, it will be found in the interior of the phagocytes, such as is seen in malarial fever. If, however, the foreign body is large, the phagocytes will surround it and will form gradually an isolating envelope of connective tissue, which is what we observe in what is called eliminating inflammation; the hypertrophy of lymphoid organs in infection can also thus be explained, for those organs are really an agglomeration of leucocytes.]

reach the favorable spot. The surgeon astonished notices the development of a gaseous crepitation, fever appears, and infection is produced when he thought it impossible. Infection has taken place by a door which he thought carefully closed and which opened itself by a process which he did not suspect.

Phthisis is infectious, the tubercule bacillus is eliminated with the pus and fragments of pulmonary tissue, its presence is discovered in the sputa, which is a certain sign. What is the value besides these facts of the minutiae of diagnosis? A bacteriological research gives you in ten minutes an absolute certainty, which the strictest and most careful clinical exploration will never give you. But the bacilli may not be present in the expectoration, even after a number of examinations, and precisely in cases in which the signs of auscultation are the more delicate. Are we not to fear lest a too exclusive notion of infection may lead the physician to neglect the education of his organs of sense and to diminish his skill in the difficult art of diagnosis? I could multiply examples to demonstrate how dangerous for the intelligence or practice of medicine it would be to overlook pathogenic processes and to attach ourselves exclusively to one of these processes. The notion of infection, when applied too exclusively, becomes excessive in its applications; the most difficult operations, owing to this knowledge of infection, have become much less dangerous. Still I am afraid it will become a too great stimulant to operative skill. The operation which was to be a curative one has already become exploratory. As I said a few minutes ago, for clinical medicine, the surgeon will become more careless and will neglect all the delicate and difficult means of clinical exploration; and, like the physician, he will allow himself to search for the absolute certainty in a more easy way but in a more dangerous one. Still, I cannot say that I am opposed to the exploratory operation, for I consider it a good procedure when necessity requires it. The exploratory operation becomes indispensable only when it is to be the first step in a probably curative intervention and when all other methods of diagnosis have failed. When diplomacy is powerless, there is some good in using a cannon; the same applies to exploratory operations.

The knowledge of infection has been very beneficial to the practice of medicine; but its practical application is such an easy one that if one allows himself to apply it too

freely, some mischief may arise from it, were it only the delicacy of diagnostic means which is liable to be neglected or even the operative intervention which is liable to become temporary in character.

The therapeutic applications of our knowledge of infection have been very beneficial to both surgery and obstetrics; this knowledge has been extended to operations in all the serous cavities and to the greater part of the mucous surfaces. As to intestinal antiseptics in particular, I can say that it can render in certain cases the same services as external antiseptics in surgery. Interstitial antiseptic therapeutics has also given good results, but general antiseptics barring a few exceptions, is more theoretical than practical. A few years ago it was considered sufficient for therapeutical application to a disease to know its infectious nature; we cannot have to-day this same certainty, for we have gone deeper into the knowledge of virulence and infection. We understand that the infectious agent acts in different ways, that a virulent disease is not, as was believed, a battle between the microbes and the animal cells, but that the real action is more often directed by the cells toward the microbes, than from the microbes toward the cells; and that it is more a process of defence of the organism than attack on the part of the pathogenic element.

We have found, also, that the microorganisms are really dangerous through the poison they secrete. This was first asserted without any experimental proofs by M. Toussaint, then indicated by M. Chauveau as explaining more readily certain results of inoculation; from M. Pasteur it received the beginning of an experimental demonstration. It has finally been definitively asserted by M. Charrin, for the pyocyanic disease; by MM. Roux and Chamberland for gaseous gangrene; by MM. Chantemesse and Vidal for typhoid fever; and by MM. Roux and Yersin for diphtheria. If the virulence of a certain disease is due to the toxicity of the matter secreted by the microbes, our therapeutical intervention must change, for poisons are not neutralized by antiseptics; yet, during the active period of the disease, when the infectious agent is multiplying rapidly, it is quite necessary that we should prevent its development, although we must not forget the poison which alone produces morbid accidents.

If this poison be secreted on an accessible surface, it can be evacuated or precipitated, to prevent it from being absorbed; if the absorption has already taken place, or if

the poison has been primarily formed in the middle of tissues, it can still be reached, burnt, by calling into action the process of combustion, or eliminated by the excreting organs. We can also combat its physiological effects by administering antagonistic substances. Amongst all these different processes, the elimination of the morbid poison is the one that is really established or demonstrated. I have demonstrated that in infectious diseases the urine carries out of the organism the greatest part of the soluble toxic substances which have been secreted in the body by the microbes during the course of the disease; that one can, in injecting the previously sterilized urine of an animal which died of the pyocyanic disease, produce in a healthy animal the principal and special symptoms encountered in this disease. MM. Charrin and Ruffier, after having injected into an animal the sterilized culture of the pyocyanic bacillus and having collected the urine, by injecting it into a healthy animal produced the characteristic paralysis met with in the pyocyanic disease.

The morbid poisons, and especially those of microbial origin, are then eliminated by the kidneys as the natural poisons are. If antiseptics can be used with advantage in the period of development of the general infectious disease, why should they be used in the later stages of the disease when the microbe ceases to be reproduced? But then, the virulent accidents have not disappeared, for they are slowly eliminated, this elimination seeming not to be complete before twelve or fourteen days. This better knowledge of infection which we possess to-day makes it possible to comprehend that in the treatment of infectious diseases antiseptics are useful sometimes but in some cases are absolutely irrational, especially when microbes or poisons no longer exist; and this is what occurs when, a long time after an infectious disease, accidents present themselves. These accidents are not infectious, they are not even toxic; but the poison has previously weakened the cells and injured their nutrition in a lasting manner. It is not with antiseptics that you will be able to repair the lasting injuries due to the infectious disease; it is only by agents which will generally modify the nutrition. There are many practitioners who, according to the modern doctrines, will treat a diphtheritic paralysis with iodine, oxygen, or carbolic acid; if better instructed in the contemporary pathogenic discoveries, they would return to the

older practice and use the neutral salts, the alkalies, iodides, sulphides, and resort especially to nervous stimulation, to frictions, to hydrotherapy, to balneo-therapy, etc. This shows that the better we come to understand pathogeny, the better we are able to place by the side of new acquisitions the remedies obtained from empiricism, and the better we can explain the success which occurred in the old medical practice. It is said that to each specific infectious disease there corresponds a special microorganism; this is not so. A pathogenic microorganism of a determined species may produce nothing, or it may start a local lesion, or again it may bring on death without a lesion. The local lesion, if it develops, may be unique, circumscribed, diffused or multiple. The disease, when it occurs, may be trifling or temporary in character, or bring on death or become chronic. The streptococcus pyogenes can produce a phlegmonous inflammation, phlebitis, angioleucitis, erysipelas, meningitis, pyæmia, puerperal fever, etc.; this puerperal fever may be accompanied by a diphtheritic exudation into the uterus, infiltration of this organ, peritonitis, venous coagulations, metastatic abscesses, suppuration of the serous membranes; or again the puerperal fever may be without any lesions. As to the local lesions, suppuration is not necessary. Such a variability of action of one single kind of microorganism was thought impossible a few years ago. To-day, the fact being recognized, it is explained by the influence of the "*terrain*" (general state of the organism) which is variable with each individual. I certainly do not contest the influence of the *terrain*; I have sustained its influence and have tried to establish it as a factor at a time when it was regarded with suspicion. The influence of the *terrain* does not explain every thing, while the microbe can account for the differences existing.

Virulence is very variable; it has degrees, it may be weaker or may be stronger. A great many circumstances influence it; the field of development, especially, the composition of the nutritive substance; the presence of air or of too much oxygen can reduce or suppress it; too little oxygen stimulates it; it becomes weakened in a medium previously poor or in a medium which has been impoverished by the growth of the microorganism; it increases when it is animalized in a nutritive medium, such as has been lately shown by M. Chauveau, who restored the lost virulence of the bacillus of malignant carbuncle by cultivating

it in broth to which blood has been added. It is rendered much stronger when it passes from an inert medium into a series of living organisms; this increase in virulence varies according to the animal species, so that it can be reduced by transplanting the microbe from a more favorable animal species to a more refractory kind.

Some of these conditions are encountered in human pathology. When the streptococcus, moderately virulent, multiplies itself in an irregular wound, in fetid cloaca in the uterine cavity, its virulence increases and can produce dangerous symptoms, which are much rarer when the streptococci are found on a wound exposed to the air. Meeting so many varieties of action, we may ask ourselves, Which is the type of the normal virulence? and we are forced to conclude that this normal does not exist.

Among the chemical functions of the pathogenic microbes, there is one which produces the toxic substance; this function is more or less active, feeble or strong. According to the case, the same microbe has a negative virulence, a feeble, a moderate, an intense or an excessive one. In this manner we explain the variability of action of the same virus, which misled the adepts of the new doctrine and made them doubt the validity of their belief.

Virulence can extinguish itself; the microbe can even cease to develop. It is not dead, however, but remains asleep in the organism, and one day awakens as a result of a local traumatism or of some disturbance of the general health; it has recovered its virulence. The return of a disease succeeds upon a short sleep. The return of the disease at the same place or at some distant point from the one primarily infected is the effect of the awakening which follows a very long sleep, and is a clinical justification of what M. Verneuil has expressed in one word, the *latent microbism*.

All this, however, appeared in contradiction to the doctrine; one could not understand why, in certain women, the regular appearance of the menses would bring on periodically an erysipelas without a new infection. The resurrection of a microbe is sometimes due to the invasion of the organism by another pathogenic agent; it is known that wherever two different microbes are in conflict in the same organism, one will overcome the other, and the result will be for this last one a neutralized effect, an attenuation. For the bacteria of malignant carbuncle, Emerich has established that its development is

interfered with by the presence of the streptococcus of erysipelas, and Pawlowsky has shown that the pneumococcus prevents its development. I have myself brought about the recovery of a rabbit inoculated with a culture of malignant carbuncle bacilli, by inoculating it afterward with the pyocyanic bacillus.

But if on the same field or medium two microbes can interfere with each other, they can also assist each other. Has not M. Roger lately demonstrated that the inoculation of the bacillus prodigiosus renders possible in the rabbit the development of a special species of gaseous gangrene to which this animal is refractory when the two microbes are not associated?

Every day, science pursues away apparent contradictions. It has cleared the microbe where it lies hidden, not only in the spleen, in the marrow of bones, in the lymphatic organs but also in the lungs, in the liver, in the kidneys and in the vascular endothelium. If its presence does not produce in those parts an appreciable pathological change, it has impressed the nutritive type; and later, when it has disappeared, chronic lesions are liable to appear,—cirrhosis, nephritis, endarteritis, valvular alteration having infection for its cause, but as a distant cause. These are all diseases of infectious origin, to combat which antiseptics are of no avail. These late localizations of infectious diseases do not proceed directly from infection, they are the result of a permanent interference with the nutrition of the cells of certain organs, which have been impressed previously by an infectious agent. They have the greatest resemblance, as regards anatomical lesions or pathogenic processes to similar alterations of these same organs which occur in general diseases of nutrition or in certain intoxications. It is for this reason that in my lectures of this year, when I am to study the localizations in general diseases, I shall consider in parallel line those proceeding from infection, those derived from a diathesis, and those which are produced by an intoxication.

To-day, before separating, I should like to leave in your mind this thought: that pathogenic notions are useful; that to possess one single pathogenic notion alone condemns one to powerlessness; that the contradictions, of which so much has been said, between clinical facts and pathogenic doctrines are only apparent, and that the scientific work of every day contributes to dissipate them in giving to the facts their real interpretation.

COMMUNICATIONS.

EARLY DIAGNOSIS OF LATERAL CURVATURE OF THE SPINE.¹

BY JOHN RIDLON, M.D.
NEW YORK CITY.

Upon the early diagnosis and the rational treatment of the conditions presenting in lateral curvature of the spine will depend the successful or unsuccessful termination of the case. When the distortion has advanced so far that the diagnosis is made by the dress-maker or some lay-friend, it may fairly be said to have passed the time for an early diagnosis, and generally passed the time for a complete eradication of the deformity.

It is not easy to say how early a case of lateral curvature can be diagnosticated. I am inclined to think that it will depend upon the cause of the curvature; for upon the cause will depend the first symptoms. A curvature following and depending upon one of the fevers, as scarlatina or typhoid, will present early symptoms differing greatly from those of a curvature following a pleurisy and depending upon the contraction of the pleuritic exudation, although, when well advanced, the distortion is in no way different. So also, a case depending upon a shortening of one lower extremity, congenital or acquired, will, in its early symptoms, differ from one due to poliomyelitis anterior, although both may progress to the same characteristic deformity. In a word, a case may begin with curvature and rotation, or without curvature, or without rotation, or without either curvature or rotation, and still present diagnostic symptoms.

An early diagnosis may be characterized as such when there is as yet no deformity of the spine, or only such deformity as can by posture or manipulation be temporarily eradicated. A deformity which, at the first examination, cannot be made to disappear, will pretty generally resist treatment, at least so far as the primary curve is concerned; although some do remarkably well, as will be seen in the case which I shall present to demonstrate the exercises.

In a case in which there is actual bony ankylosis of the vertebræ on the concave side, we can not hope in any measure to change the primary curve, although much can be done to render the deformity apparently less by reducing the prominent hip and the compensatory curves above and below the area of ankylosis.

¹ Read before the Surgical Section of the New York Academy of Medicine, October 8, 1888.

A successful termination may mean an eradication of the deformity and an erect and graceful carriage, or only an arrest of the primary and a reduction of the secondary curvatures with increase of health and strength; or it may mean any degree between these extremes; a termination is not considered successful which leaves the patient encumbered with a brace or jacket, and with muscles so weak and flabby that the supported position can not be maintained when the support is removed; neither do we consider as successful, cases that present a greater deformity at the end than at the beginning of treatment.

By rational treatment is understood the attempt to meet indications, as presented by causation and symptoms, in each individual case, with the end constantly in view to restore the figure so far as possible to the normal contour, and so to strengthen the muscles that this normal contour may be easily and instinctively maintained. Routine treatment of any kind is to be deprecated, but the routine treatment of every case of lateral curvature, no matter what its cause or how varied its symptoms, by any one kind of brace or any one exercise is opposed to our idea of rational treatment.

Rotation of the vertebral bodies, causing the convexity and concavity—the bulging and the falling in—is the characteristic symptom of this deformity, and in a very large number of cases it appears very early. This bulging can be best seen by causing the patient, stripped to the hips, to bend forward, the arms hanging and the knees straight and rigid. But even before this rotation can be detected there are, in some cases, characteristic symptoms: as the patient walks, if unconscious of observation, the head is carried somewhat to one side, the shoulder of that side is slightly advanced, and the foot of the same side is rotated out.

If the patient is asked to lie down upon some plane surface, as a table or the floor, and is simply told to "lie straight," this carrying of the head to one side and outward rotation of the foot will become more easily apparent. If then, with the arms straight and the elbows and wrists rigid, the patient is made to grasp a stick lying across the thighs, with the hands so far apart that the arms are parallel, and is directed to carry the stick forward and upward over the head, it will be seen that the plane through which either arm passes is not parallel with the antero-posterior plane of the body, but that, as the arms pass upward, they will swerve to one side—the side toward which

the head leans and the foot points. If the surgeon now grasps the stick between the patient's hands when it is resting on the thighs and forcibly makes the arms follow planes parallel to the antero-posterior plane of the patient's body he will distinctly see and feel the stick twist in his hand. At starting, one end of the stick will be lower than the other, that is, farther down the thigh and that arm appear the longer arm; when it has passed through ninety degrees and is opposite the face, the other arm will appear the longer; and when it has been carried ninety degrees more, the first arm will again appear the longer.¹ This phenomenon appears to depend upon the advancing of one shoulder beyond the other, and, together with the deviation of the head and the rotation of the lower extremity, can doubtless be traced to the same central lesion that causes the subsequent vertebral rotation.

In cases in which these symptoms have been noted, distinct rotation has been observed for a very considerable time before any lateral deviation of the line of spinous processes began to appear. On the other hand, when the lateral deviation appears before rotation, as in curvature depending upon one short lower extremity, I have not found the neck and shoulder symptoms and the outward rotation of the foot.

It may be asked if *true scoliosis* can be caused by a short leg or a contracted pleural cavity, and I should answer, in the present uncertainty as to the etiology of *true scoliosis*, that lateral deviation of the spine with rotation of the vertebrae, and all the characteristic forms in the late stage do follow, and may undoubtedly be caused by, a short leg or a contracted pleural cavity, and that such a curvature is to all intents and purposes as *true a scoliosis* as one that comes without known causation.

For the sake of greater clearness in arranging symptoms I shall divide our cases into two classes: (1) those that present rotation before curvature, and (2) those that present curvature before rotation.

In the first class, in which rotation appears before the curvature, the symptoms generally appear in the following order: Outward rotation of the foot on the side toward which the convexity is to look—this is more marked when the patient lies supine than when he is standing; the head is carried somewhat toward the same side; the

shoulder is carried forward, separating the scapula from the line of the vertebral spines farther than on the opposite side. If the patient be a woman with *mammæ* developed, there will be found on palpation atrophy of the gland on the side of the advanced shoulder. Then comes bulging of the ribs on this side and sinking in of those on the other side—this is best seen when the patient bends forward. About this time comes the lateral deviation of the line of the spinous processes. I shall not venture an explanation why this is more frequently seen in the dorsal than in the lumbar spine, and more frequently to the right than to the left. As the curve increases the shoulder of the concave side drops lower than that of the convex side, and either a compensatory curve appears in the lumbar region, or the hip of that side becomes elevated and prominent. When there is a compensatory curve in the lumbar region it is the hip on the side of the convexity of the primary curve that becomes prominent. As the bulging of the ribs increases, the shoulder on that side is carried further forward, and the lower angle of the scapula is tilted out in marked contrast to the one on the opposite side, which lies abnormally flat against the sunken chest wall. If the deformity is far advanced this scapula, on the convex side, can not be carried back into place by any effort of the patient; while if the deformity is not far advanced it can be pretty nearly replaced. After a time the compensatory curve, which at first was simply a lateral deviation, undergoes rotation, and it may even become rigid. Lordosis, also, is of not infrequent occurrence. In some few cases there is found to be some degree of shortening of the muscles of the calf of one or both legs, and even a slight degree of *talipes equinus*.

The symptoms above enumerated may go progressively on to almost any degree of deformity, or they may cease to progress at any time, either with or without treatment. One patient, for instance, wore a brace for some two years, and grew gradually worse. She was then treated for some months by electricity and certain passive manipulative exercises, with little or no gain. During the following two years she had no treatment, yet the progress of the distortion stopped and she became somewhat straighter. Another patient wore the same brace and had passive manipulative exercises for about ten months, during which time she grew gradually worse; but with the brace removed and under active manipulative exercises and

¹ This latter condition is reversed when the deformity has progressed so far that one shoulder is higher than the other.

gymnastics she has become rapidly straighter. The progress of the distortion is sometimes very slow, going on for upward of ten years; in other instances the same degree of deformity may be reached in a few months.

In the second class of cases, in which the curvature precedes the rotation, the first symptom appearing is the lateral deviation of the line of the spinous processes. This, however, is not usually noted, since the curve, not being rigid, is not permanent; and the symptom which is usually first noted is the prominent hip. Not infrequently, however, we can obtain a history of an uneven gait and a faulty habit of standing or sitting in a flabby and rapidly growing child. The relation of the prominent hip to the curvature, that is, to the convexity or concavity, will depend upon the location of the curve. If it is lumbar, the prominent hip will be on the side of the concavity; and so it will be if there is only one curve occupying most of the dorsal and lumbar spine; whereas, if there is a double curve, to the right in the dorsal and the left in the lumbar spine, the prominent hip will be that on the side of the dorsal convexity. After a curvature of this kind has existed for a certain time, usually many months or some years, rotation supervenes and with it all the consequent symptoms: bulging of the ribs on one side in the back and of the other side in the front; flattening of the ribs of the first side in front and of the opposite side in the back; tilting out of the lower angle of the scapula and elevation of shoulder on the side of the convexity, and flattening of the scapula and lowering of the shoulder on the side of the concavity. In this class we have not found outward rotation of the foot, and the peculiar advanced shoulder during locomotion, which is so often seen in the cases of the first class; but the lateral deviation of the head appears subsequent to the lateral deviation of the line of the spinous processes. It is very doubtful if true mammary atrophy occurs in the cases of this second class, but I have observed a smaller but not a flabby gland on the side of the convexity. A considerable number of patients also present a condition of flat-foot.

The spinal rigidity comes slowly as compared with the cases of the other class, and these are, therefore, by so much, more amenable to treatment. In the cases in which there is a short lower extremity it is an advantage to have the length equalized by a high shoe, but this is not absolutely necessary for a good result. In cases in

which the deformity is due to, or associated with, the contraction of a pleuritic exudation great care should be exercised in the use of active manipulation, lest the inflammatory process be renewed again.

Treatment should consist in the reduction of the deformity, and the development of the muscular strength to maintain the acquired position. This is gained by posture, manipulation, massage, and gymnastics with assistance and with resistance. In many cases electricity is of use, and the proper arrangement of the clothing is of no small importance; but of more importance than any other one thing I believe to be the constant maintenance, *by voluntary effort*, both during the exercises, and in the intervals between the exercises, of the *best possible position*—the "keynote position" of Roth. As to the use of braces, supports, jackets, and corsets, it is difficult to lay down any uniform rule. In some cases they are unnecessary, in some even harmful, while in some they are of great comfort to the patient; but it should not be lost sight of that their use is prejudicial to muscular development, and delays the ultimate favorable result.

THE PATHOLOGY AND SURGICAL TREATMENT OF SEBACEOUS TUMORS.¹

BY CHARLES B. WILLIAMS, M.D.,
PHILADELPHIA.

Sebaceous tumors, or as they have been variously called by different authors, *encysted tumors*; *atheromatous cysts*—and *wens*, are classified pathologically among the sebaceous cysts. The pathology of the sebaceous tumor makes quite an interesting study, and, in fact, a certain knowledge of this pathology is essential before we can intelligently perform the radical operation. Sebaceous tumors, or as they are more generally called, *wens*, are quite frequent among hairy persons.

Their favorite seats are in the sub-cutaneous connective tissue, especially of the scalp and scrotum. In the interior of the body they are more rare. These tumors consist of accumulated masses of epidermis and sebaceous matter in the hair follicles, and are a result of the distension of the sebaceous gland and its duct, with hypertrophy of the walls, which forms a thick, tough sac or cyst. They vary in size from that of

¹ Read before the D. Hayes Agnew Surgical Society, Feb. 14, 1889.

a pea to that of a walnut or a pigeon's egg, or are even larger, and may occur singly or in numbers.

In shape they are habitually flattened and lenticular. According as their contents are fluid or solid they are termed *melicerous* or *steatomatous* wens.

The *melicerous* wens (μελι—honey; κηρος—wax) contain a substance semi-fluid in consistency like honey, comprising a large quantity of free fat and isolated epidermal cells.

The *steatomatous* wens (στεαρ, στεατος—solid fat) have more solid contents, consisting of the same elements as the *melicerous* wens, only there are more epidermal cells and less free fat. In both forms the fat undergoes a metamorphosis, and as it is no longer subjected to nutritive changes it gives rise to crystals of stearic acid, margarin and cholesterolin. The cyst is located in the sub-cutaneous tissue. The skin covering it is thinned at the surface, and its papillæ are flattened or they have disappeared entirely—while the surface is smooth, more or less devoid of hair, and with atrophy of the sebaceous glands.

As regards the microscopical structure of the cyst itself we have to consider first its fibrous wall, which consists of connective tissue with flattened spindle shaped cells, a tissue identical with that of the inner coat of arteries and that of fibroma. This disposition, we are told, is caused by pressure exerted upon the walls by the incessant accumulation of the elements contained within the cyst. Fatty, atheromatous, and calcareous degenerations may take place in this connective tissue wall, and this still further increases the analogy of this membrane with the internal coat of arteries. Hence also the name *atheromatous* cyst. Next to the fibrous membrane we have layers of stratified pavement epithelium which undergo evolution similar to that found in sebaceous glands.

The cells nearest to the spindle cells have large nuclei surrounded by a small quantity of protoplasm; and it is probably here that new cells are constantly being formed. Next we have a layer of horn-like cells which are devoid of nuclei. And lastly an innermost layer containing sebaceous globules. Often the horn-like layer of cells detaches itself from the wall of the cyst and forms a shell-like membrane, slightly translucent and almost cartilaginous in texture. It is within this membrane that we find the *melicerous* or *steatomatous* contents. Hence the necessity, in operating, of removing this

membrane along with the contents of the sac. For if one should leave the membrane behind and merely evacuate the contents of the cyst, new cells would be engendered and cast off, together with the formation of more sebaceous globules which would in turn be cast off, and from this increase of new material we would have, in a short time, a recurrence of the sebaceous tumor.

The diagnosis of sebaceous tumors is an easy one, and probably the only tumor with which it may be confounded is the lipoma. In the lipoma or fatty tumor we have the fatty mass invested by a capsule. From this capsule septa pass inwardly, dividing the tumor into lobes of various sizes. Making the skin tense and passing the fingers over the lipoma, then, we get the dimpling which is characteristic of this tumor. And besides we may feel its lobular structure by careful manipulation. Another final proof we derive from our knowledge that all fatty matters become hardened by the application of cold; hence if a spray of ether be directed upon a lipoma, its contents will be rendered hard and firm. The treatment, however, would be the same in both tumors, i.e., excision; and a slight error in diagnosis would, therefore, not be accompanied by any serious results.

In an operation for sebaceous tumors, at which I assisted last autumn, three wens were removed from the head of the patient, without the use of ether. A sharp bistoury was, by a rapid thrust, carried through the longest diameter of each tumor, slitting up the cyst and disclosing its contents, which were of a greenish yellow color and *melicerous*, or semi-fluid in consistency, containing flakes of sebaceous matter and broken down cells. The contents were evacuated and with the aid of a pair of forceps the membranous wall of the cyst was carefully dissected away from the scalp. The hemorrhage was very slight and was easily controlled by pressure with sponges. The operation was conducted with antiseptic precautions, and afterward the parts were washed with bichloride solution, the edges of the wound were brought together and held by a single suture, an antiseptic dressing was applied and held in place by a few turns of a roller bandage.

As regards the use of an anæsthetic in these operations, I may say, that it depends entirely on the patient:—Should he happen to be as great a stoic as the patient referred to above was, he will require no anæsthetic; but if he be timid and afraid of a little pain then ether had better be administered.

SOCIETY REPORTS.

SIXTH CONGRESS OF THE ITALIAN SOCIETY OF SURGERY.

AT BOLOGNA, APRIL 16, 17 AND 18, 1889.

(Specially reported for the MEDICAL AND SURGICAL REPORTER.)

The meeting of the Italian Society of Medicine took place at the University of Bologna, which celebrated last year its eighth centennial anniversary. The meeting was presided over by DR. LORETA, Professor of Clinical Surgery at the Faculty of Medicine of Bologna.

PROF. CECCHERELLI, of Parma, read the first scientific paper on

Surgical Intervention in Cases of Tubercular Peritonitis.

Sometimes after the diagnosis of abdominal tumor has been admitted in a certain case, we find, after opening the abdomen, that we are in the presence of a tubercular peritonitis; this mistake of diagnosis, however, can become, in certain cases, of some utility to the patient. In view of the fact just mentioned, I have tried to consider in which cases of tubercular peritonitis we are enabled, by the aid of surgery, to be of some use to the patient, and what are the reasons of the utility of our intervention.

I have had the opportunity of studying this question on four patients, who presented themselves at my clinic. The first case was that of a woman, 32 years old, who had had five children; after her fifth child she suddenly lost her appetite, and her abdomen became enormously enlarged, due to the collection of a great quantity of liquid in the peritoneal cavity. On opening the abdominal cavity, tubercles were discovered; and after the withdrawal of several pints of liquid, and washing out the serous membrane with a solution of thymol, and the dusting of the parts with iodoform, all the symptoms disappeared and the patient was cured. In a second case, in a young boy of eleven, who was suffering from a progressive ascites, the same treatment as in the preceding case—thymol and iodoform over the involved tubercular part—was employed. Several weeks later, however, the ascites reproduced itself, and I had to resort to a second laparotomy, which exposed numerous adhesions between the coils of the small intestine and between the parietal and visceral layers of the peritoneum; cultures made from these new formations gave neg-

ative results. The boy is very much improved as regards his abdominal condition, but for some time past he has shown signs of involvement of the apex of one lung.

My last two laparotomies were performed on children, one 6 years the other 8 years old; the ascites was very pronounced, and encysted in separate pockets, which I was able to empty and disinfect very easily. A microscopical examination showed the specific tubercle bacillus. Both these patients were cured and in both the diagnosis of tubercular peritonitis was well proven by physical test.

Up to date, 86 cases of tubercular peritonitis have been recorded as having been treated by laparotomy; out of which 52 have been cured, six improved, in five cases the result was unknown, the patients having been lost sight of; and, finally, twenty-five died.

I divide tubercular peritonitis into two forms: first, dry tubercular peritonitis; second, ascitic tubercular peritonitis. In the first form, surgical interference is of no avail and would be impossible or useless on account of the numerous adhesions that exist, which it would be very difficult and very dangerous to remove. In the ascitic form, however, surgical intervention is to be recommended, especially if the liquid is encapsulated; if the liquid is free in the abdominal cavity, simple puncture, accompanied by washing out of the serous cavity, is all that we can do.

The cure in cases of laparotomy is produced by an adhesive peritonitis subsequent to the operation; this leads to the formation of connective tissue bands which surround and strangulate the tubercles; when these adhesions already exist, as in the dry form of peritonitis, operative interference would be much more harmful than useful.

PROF. DURANTE, of Rome, does not believe that tubercular peritonitis can be absolutely cured; he thinks that these so-called cures are only of a temporary character, as we all know that tubercular peritonitis can remain localized for over ten years. Moreover, tubercular peritonitis is also liable to be diagnosed when we have to deal with a pseudo-tubercular state of this serous membrane.

PROF. BASSINI, of Padua, mentions the fact of two of his patients with tubercular peritonitis, who died from pulmonary tuberculosis, one eighteen months and the other two years after the laparotomy.

DR. FERRARI also accepts the operation as a palliative against serous peritonitis which complicates tubercular abdominal affections; but he does not believe in the final cure of the disease.

PROF. RUGGI, of Bologna, read a paper on the

Use of Corrosive Sublimate in Laparotomies.

I present to you to-day, a statistical account of a series of 115 cases of laparotomies, which I performed last year in my hospital, as well as in my private practice, and in which bichloride of mercury solutions have been used. My cases are divided into:

Single oöphorectomies, 21; cured, 21. Oöphorectomies and salpingectomies, 10; cured 10. Castration for several causes, 14; cured 14. Extirpation of sub-peritoneal fibroids, 4; cured 4. Salpingectomies, 15; cured 4. Supra-vaginal amputations of the uterus for fibroid tumors, 24; cured 19; deaths 5. Laparo-hysterotomy for sarcoma, 1; death 1. Hysterotomies by Antona's method, 3; cured 3. Extirpation of cysts of the parametrium, 2; cured 1; death 1. Intra-abdominal straightening of the uterus by my method, 19; cured 19. Laparotomies for tuberculosis of the peritoneum, 3; cured 3. Echinococcus cysts of the peritoneum and liver, 2; cured, 2. Exploratory laparotomies 5; cured 5. Ascites, 1; cured 1. Laparotomy for foreign body, 1; cured 1.

I have had in all 107 cures and eight deaths, two of which I attribute to poisoning by corrosive sublimate. These two patients I operated upon for fibroid tumors of the uterus; death occurred in less than twenty-four hours and was preceded by a rapid collapse. On *post-mortem* examination, we found a degeneration of the renal and hepatic cells of toxic origin. The poisoning must have taken place as follows: the napkins to be used for the dressing of the peritoneum had been dipped in and kept for too long a time in a solution of corrosive sublimate, which had probably caused the deposition of the salt on the napkins themselves. Hereafter I intend to use exclusively boiled water, instead of the sublimate solution.

PROF. BASSINI has observed two cases of death as a result of poisoning with corrosive sublimate; he now uses salicylic acid instead.

PROF. DURANTE, of Rome, asserts that peritoneal absorption readily takes place only when we have to deal with a normal serous membrane; but he thinks that when there

exists an irritated condition of the peritoneum, we can safely wash this serous membrane even with a 1 to a 1000 solution.

PROF. D'ANTONA, of Naples, has made a series of thirty-two ovariectomies, with not one death, which he attributes to the use of corrosive sublimate employed with all due care. Among his cases he mentions two of adeno-carcinoma, cured by extirpation, without a recurrence of the disease.

PROF. D'ANTONA, of Naples, reported a case of

Cure of Hystero-Epilepsy by the Extirpation of the Uterine Appendages.

I have operated on a young woman, who, after having suffered from metrorrhagia due to a uterine retroflexion, presented all the classical symptoms of hysteria, namely: ovarian pain; anæsthesia, shortening of the visual field, hystero-epileptic attacks which could be brought on by compression of the ovaries. The reposition of the uterus brought about a temporary amelioration, but soon afterward the metrorrhagia occurred again, and I was compelled to remove the appendages. The tubes were found in a state of congestion, and the left ovary was undergoing cystic degeneration, while the right one was in a much advanced stage; still the patient recovered perfectly.

DR. M. FRANGELINI, of Frosinone, reported a case of

Extirpation of an Ovarian Cyst in a Pregnant Woman.

I have extirpated a very large ovarian cyst from a woman who was in her sixth month of pregnancy, the pregnant condition being recognized only at the time of the operation. The incision started at the symphysis pubis and extended to about four inches above the umbilicus. The patient was walking fourteen days after the operation. The pregnancy did not come to full term. The patient did some hard household work, besides indulging in too frequent sexual connection; these brought on labor, which was uncomplicated. This observation demonstrates that we can extirpate ovarian tumors during pregnancy without bringing on abortion.

DR. BOGGI, of Bologna, read a paper on Dilatation of Strictures of the Cardia and Pylorus.

In presenting to you the statistics of the laparotomies which have been performed at the clinic of Bologna, I shall call your

attention especially to those which have been made for diseases of the stomach, to produce a digital dilatation of the pyloric strictures and an instrumental dilatation of the cardia. I shall not attempt to give you the *modus operandi* of the process, but shall confine myself to recording observations made upon my two last patients.

Case I.—A man 56 years old, had been sick for eight years past, vomiting every two or three days, about seven hours after the meal, a quantity of badly digested food. The hypogastric region was in a tumefied condition, while the inferior portion of the abdomen was quite retracted. He evacuated his bowels only every eight or nine days. As a result of my examination I concluded that I had to deal with a fibroid stenosis of the pylorus. After having opened the abdomen and then the stomach, the pylorus was hardly large enough to allow the passage of the little finger; but gradually dilatation occurred and I first could introduce one index finger, then the other one, and then was able to make a forcible stretching. The patient is to-day cured, eats well, has no more vomiting, and his digestive functions are in a perfect state.

Case II.—My second patient was a man, 48 years old, who had been suffering for several years. On examination we found a cicatricial stricture of the cardia, with dilatation of the œsophagus immediately above it; the stomach was very much retracted.

After opening the abdomen and stomach, the latter organ was very difficult to find or recognize, on account of its small retracted form. The closed extremity of Dupuytren's *revulseur* was introduced into the cardia, and dilatation was made, after which a large œsophageal sound was introduced into the stomach. Fourteen days later, the patient left the hospital completely cured. This man had been suffering for twenty years, and since the operation he has been feeling perfectly well, having no more any rejection of food after his meals.

DR. BENDANDI, of Bologna, cannot admit that a temporary dilatation, such as is made with the fingers, can really bring about a permanent cure. He admits the persistency of the dilatation of the cardia, as this dilatation can be maintained by the œsophageal tube; but he cannot understand how dilatation of the pylorus can remain permanent.

DR. PUTLI, of Bologna, like the preceding gentlemen, cannot admit the persistency of the dilatation of the pylorus, considering that for stricture of the urethra we are obliged, after the stricture has been cut, to

maintain the dilatation by the occasional passage of a sound.

DR. D'ANTONA says that strictures of the pylorus cannot be compared with strictures of the urethra; they are more analogous to strictures of the anus, which when once forcibly dilated remain pervious.

DR. POGGI: I have studied the effects of forcible divulsion on healthy sphincters and on cicatricial tissues, and as a result of my researches, I think I can affirm that if divulsion does not succeed in certain very rare cases where the pyloric ring is completely transformed into a cicatricial tissue, there exists on the other hand a very large series of retractions caused by partial and superficial cicatrices, which are easily dilatable. I have made on the normal pylorus of several dogs, a dilatation which was still recognizable one year and a half after the operation.

DR. POSTEMPSKI, of Rome, read a paper on the

Reduction of Diaphragmatic Hernia.

At the Hospital of Consolation, in Rome, I observed, some four months ago, a patient who had been wounded in the left seventh intercostal space, and who, while he was lifting a heavy weight, was suddenly seized with pulmonary, cardiac and intestinal symptoms, and presented in addition the symptoms of intestinal obstruction with displacement of the heart.

The diagnosis of diaphragmatic hernia was confirmed by the *post-mortem*; the hernial part was not adherent to the diaphragmatic opening, it was only compressed and strangulated. I then thought that we might bring about a radical cure of such hernias, by penetrating through the thorax instead of through the abdomen; several experiments on the cadaver convinced me that it was a feasible operation, which six weeks later I had the opportunity to perform on the living subject. The patient was a young man who had received a wound in the eleventh intercostal space, of three and a half inches in length; after having enlarged the opening three-fourths of an inch more, I made two perpendicular incisions, as if I was going to make a thoracoplastic operation; the opening being more dilated, I had all the light and space desired. I had to deal with a hernia of the omentum. I freed it from its strangulation and then brought the lips of the diaphragmatic wounds together by the aid of forceps. I then sutured with a very long needle-holder. Next the external wound was sutured. After

the operation, a very large pneumothorax made its appearance, but it progressively diminished until the twelfth day, when it had entirely disappeared. Eighteen days later, my patient was presented before the Academy of Medicine of Rome, completely cured.

PROF. DURANTE reported a case of

Extirpation of the Cæcum,

which he had performed on a woman, 52 years old, who for four or five years past had suffered very much in the right iliac fossa, when she evacuated her bowels. In this region, a resistant tumor could be felt extending down as far as the superior strait of the pelvis; the diagnosis was atrophic or fibrous cancer of the cæcum and adjoining parts.

The operation was a very tedious one, on account of the numerous adhesions which existed between the small intestine and peritoneum and the tumor, and for the additional reason that it was difficult to differentiate the small from the large intestine, on account of the unusual displacement of the parts. I succeeded, however, in cutting the cæcum, and I united the intestinal stumps by means of sutures in three rows. The patient was rapidly cured.

Seven days after the operation, the patient had her first fecal passage, on the tenth she left her bed. An examination of the extirpated parts showed that we had to deal not with a cancer, but with a case of chronic, indurated typhlitis or perityphlitis of tuberculous origin.

DR. TROMBETTA has also extirpated the cæcum with the ascending colon, thinking he had to deal with a case of cancer, while it was one of chronic typhlitis and perityphlitis accompanied by numerous small abscesses. He formed an external fistula, but the patient died on the fourteenth day from peritonitis due to rupture of the intestine.

PROF. TIZZONI, of Bologna, read a paper on the

Etiology of Tetanus.

A case of tetanus, which has lately taken place at the surgical clinic of Bologna, has given me the opportunity to make, in collaboration with Miss Cattani, *privat-docent* of our Faculty of Medicine, bacteriological researches on this very dangerous affection. The patient was a workman, who fell and sustained a complicated fracture of the arm; the fractured bone had gone through the skin, and had implanted itself in the earth.

The blood of the wounded person appeared normal on microscopical examination; perhaps it coagulated too rapidly. Cultures on serum, made with this blood, remained negative, and inoculation of rabbits gave no pathogenic effect. We next made cultures with the liquid obtained on the surface of the fracture, and with liquid obtained at some distance from the immediate wound, but still in the inflamed region. Of all these cultures, the only ones which have given positive results are those which have been made with liquids obtained from the surface of the wound. After the death of the patient, I tried to ascertain in what organs the virus had propagated itself, from the seat of fracture. For this purpose, I made cultures from the nervous system and spleen; but all have given negative results; the liquid alone which was derived from the wound itself produced positive cultures and killed the animals which were inoculated with them. The cultures obtained on the gelatinized blood-serum are mixed cultures; they liquefy the serum, which is transformed into a yellow liquid, having tetanizing qualities highly developed; injected into animals, it kills them in twenty-four hours, with well defined tetanic symptoms.

We have cultivated this liquid, and we have assisted the development of mixed colonies, in which we have been able to isolate three species of microorganisms: (1) a streptococcus in globular colonies, which do not liquefy the gelatine; (2) a diplococcus, exactly similar to the one of Fraenkel, and having all its biological characters; (3) a bacillus, identical in every way with the tetanic bacillus of Nicolaier and Rosenbach.

We have been able to isolate these bacilli, the culture of which is rapidly weakened when on serum, but which will keep much longer on agar-agar. We have been able to bring them up to the ninth generation. The injection of such cultures invariably produces tetanus.

PROF. LAMPIASI, of Trapani, said: The microbe of tetanus which I have discovered has well defined characters, and has always produced a typical case of tetanus in the numerous animals in which it has been inoculated. I have a culture of this microbe which has kept its virulence for the past two years. As my results differ from other experimenters I am led to believe that traumatic tetanus differs from the rheumatic form, and that each can be developed by a different microbe.

Dr. Lampiasi also mentioned the fact

that cultures made with Rosenbach's bacillus produce no tetanic phenomena.

DR. TIZZONI: I admit that the pure cultures of the bacillus of Rosenbach have no pathological action, it is only by the entire liquid and its contained bacilli that the tetanic symptoms are produced. My researches are different from those of Dr. Lampiasi, for I have started from a case of traumatic tetanus while the one which has been studied by Dr. Lampiasi was a case of spontaneous tetanus. In the inoculated rabbits signs of infection were found only in the spleen.

(To be continued.)

KENTUCKY STATE MEDICAL SOCIETY.

THIRTY-FOURTH ANNUAL MEETING, AT RICHMOND, MAY 8-10, 1889.

The Kentucky State Medical Society held its thirty-fourth annual meeting at Richmond, Ky., May 8, 9 and 10, 1889. The reports of the various officers and committees showed the society to be in a prosperous condition.

The address of the President, DR. L. S. McMURTRY, was a history of the society. It was brief and to the point. Much satisfaction was expressed by the various members at the new medical practice law which has just gone into effect, and on motion of Dr. J. N. McCormac, of Bowling Green, the President was instructed to appoint a committee, consisting of three in each county, to look after the enforcement of the new law. The surplus funds in the treasury at the close of this meeting are to go toward the prosecution of violators of the law.

A banquet was given at the Garnet house, and was a very pleasant affair. Toasts were responded to by the President, Dr. McMurry; Ex-Governor McCreary, of Richmond; Dr. W. H. Wathen, of Louisville; Dr. D. S. Reynolds, of Louisville; Dr. J. M. Mathews, of Louisville; and Dr. O. D. Todd, of Eminence. A hop was also given the Society at the rooms of the Madison Club.

The officers elected for the ensuing year are as follows: *President*, Dr. John A. Ochterlony, of Louisville; *Senior Vice-President*, Dr. William Jennings, of Richmond; *Junior Vice-President*, Dr. R. L. Willis, of Lexington; *Permanent Secretary*, Dr. Steele Bailey, of Stanford; *Assistant*

Secretary, Dr. John Young Brown, of Henderson; *Treasurer*, Dr. J. B. Kinnaird, of Lancaster; *Chairman of the Committee of Arrangements*, Dr. James H. Letcher, of Henderson.

A good feature of the scientific part of the programme was the reports on progress in the different departments. That on Surgery was made by Dr. W. L. Rodman, of Louisville; that on Medicine by Dr. J. W. Gilbert, of Lawrenceburg; on Hygiene, by Dr. J. N. McCormac, of Bowling Green; on Gynecology, by Dr. W. H. Wathen, of Louisville; that on Obstetrics by Dr. J. G. Cecil, of Louisville; on Laparotomy for Penetrating Shot Wound of the Abdomen, by Dr. David Barrow, of Lexington; on Medical Ethics, by Dr. Dudley S. Reynolds, of Louisville; on Diseases of the Rectum, by Dr. J. M. Mathews, of Louisville; on Ophthalmology, by Dr. S. G. Dabney, of Louisville; on Otology, by Dr. J. M. Ray, of Louisville; on Progress and Treatment of Pulmonary Tuberculosis, by Dr. F. C. Wilson, of Louisville; on Vital Statistics, by Dr. T. B. Greenley, of West Point.

Cincinnati was represented at the meeting by Drs. T. P. White, A. B. Thrasher and E. S. McKee. Drs. Thrasher and McKee read papers; the latter was a delegate from the Ohio State Medical Society.

DR. J. A. OUCHTERLONY, of Louisville, read a paper on the Transmissibility of Tuberculosis, which was of much interest. The theory of inheritance he thought had been thoroughly shaken. Tuberculosis is rarely if ever congenital. The object of the paper was to show that tuberculosis can be transmitted from the lower animals to man. There can be no security from tuberculosis as long as tuberculous meat and milk are used. He insisted that the medical profession should bring this matter before the public and instruct them thereon. On motion, such a committee was appointed for such a purpose.

Several reports of cases and papers on the subject of extra-uterine pregnancy were furnished. The general opinion was in favor of operation, and not much faith was placed in the treatment by electricity, as it was thought practically impossible to diagnose this condition before the twelfth week; and what to do with the tumor when the child was killed by electricity was a question of difficulty.

DR. JOSEPH M. MATTHEWS, of Louisville, read a paper on the Importance of Rectal Examinations to Life Insurance Companies. No company, to his knowledge, demands

rectal examinations. He reported several cases in which applicants were received who had serious rectal trouble, which soon proved fatal and the insurance companies were heavy losers.

The discussion of acute traumatic tetanus was one of considerable interest, and drew out a number of case reports and treatment. The general opinion was that bromide of potassium is the best remedy. The only fear is that it may not be given in doses of sufficient quantity. Dr. J. C. Brooks, of Paducah, had given five grains of morphia hypodermically to a man once who was given over to die of traumatic tetanus, and the man recovered and remained well.

REPORTS OF CLINICS.

PHILADELPHIA HOSPITAL.

SURGICAL CLINIC—DR. STEINBACH.

Syphilitic Disease of the Tibia.

The patient before you, a girl twenty-two years old, is suffering from some severe bone lesion. The region of the tibia near the knee is riddled by several sinuses. The knee itself is ankylosed. Whenever there is severe disease near a joint, the joint itself will necessarily be fixed to avoid pain and, from the inflammation in the neighborhood, the joint structures will be bound together, not in a bony union but in a false ankylosis.

I do not know what I shall do here. I shall examine first and, if the joint is involved at all, will resect it and give the patient a fixed limb to walk on. Still, the bony tissue left may be too little to allow a resection at present and, in that case, there is danger that an amputation may have to be done at no distant time.

Bone diseases may be caused by traumatism, occasionally by struma, but, I believe, in this case it is due to a specific disease, which I need not name. The indications of knee-joint trouble are not very apparent here; still, the patella is hardly movable and the joint is fixed at an obtuse angle. It is supposed that an obtuse angle in the leg is better than a straight limb, but I do not find it so.

A long incision will be made over the tibia, and the dead bone found and removed. The probe entering a sinus goes straight up to the cartilage of the joint. The head of the tibia is the usual seat of necrosis and

here the cancellous tissue immediately beneath the articular surface is so badly involved that my finger sinks into the bone. I have already invaded the knee-joint in following up the diseased structures. The bone is a mere shell, so that resection can not be thought of, there being no structure underneath to build on. The probability is that we shall have to amputate this limb, and it would be proper to amputate at once; but we have not the consent of the patient.

A large portion of the head of the tibia was curetted away, so that only a layer of cartilage was between the finger and the knee joint, which was distinctly involved. An Esmarch bandage had to be applied to control hemorrhage. Continuing, Dr. Steinbach said: In young subjects it is possible to remove large masses of bone and still have the cavity fill up. Care must be taken to leave no dead bone behind, otherwise the operation will be a failure. It is the same work as a dentist's, only on a larger scale. In removing the dead bone, I have left only a thin shell posteriorly, but the popliteal and the posterior tibial are so well covered with soft tissues that there is hardly any risk of injuring them.

It will be necessary to take even greater care of the limb than if it had been amputated, for the bone will break readily, so that a splint will be used. I curette thoroughly all the sinuses which led to the dead bone, and, although it is to be treated as an open wound. We desire to approximate the soft parts to some extent, and I will insert a few sutures and then the cavity will be packed with iodoform gauze.

Vertebral Abscess.

Abscess in the lumbar region almost always indicates caries of the vertebræ. It would be proper to speak of abscesses commonly called lumbar or psoas as vertebral abscesses, since it is entirely accidental whether they present below or above Poupart's ligament or in the region of the lumbar muscles. There is a villous membrane, apparently pyogenic, but the pus is really secreted from the vertebræ or intervertebral cartilages. We cannot, as in the last case, go down and remove the carious bone, but must be content with palliative treatment, and, as the internal organs are generally infiltrated with tubercles, palliative treatment is all that is really indicated. Before the days of antiseptics it was considered fatal to open these abscesses, but now we open them with impunity.

This patient has had other abscesses of this kind opened at different times during the last few years, so that she evidently has considerable vitality.

This abscess presents in the hollow between the lower lumbar vertebræ and the crest of the ilium, and near the median line. This is by no means an indication that the subjacent parts are affected. It may come down from the dorsal region, but more probably from the lumbar vertebræ. Since the parts have no large blood vessels, special care in making the incision is not necessary. Possibly this abscess communicates with the track of an old psoas abscess, which has been opened in front. Incising the abscess and introducing the finger, I find that this is the case, the abscess is only a compartment of a regular psoas abscess which has found its way around the crest of the ilium. I shall have the abscess washed out, a drainage-tube introduced, and the wound dressed antiseptically.

NEW YORK CORRESPONDENCE.

Operations for Multilocular Ovarian Cyst, Pyosalpinx and Pelvic Abscess, Lacerated Perineum, Spina Bifida and Necrosis of the Tibia.—The Hot Air Treatment of Phthisis.—Some Favorite Bellevue Prescriptions.

NEW YORK, May 6, 1889.

Dr. W. E. Bullard, of the Post-Graduate School and Hospital, removed a multilocular ovarian cyst, March 30, which was interesting from its size and contents. The patient was Catherine D., 45 years old, and a seamstress by occupation. Her history was rheumatic. She began to menstruate at 17, and was fairly regular until seven years ago, when her flow began to diminish. A year later it stopped entirely, and has not since returned. About this time, a tumor was felt in her abdomen. It grew gradually until when she entered the Post-Graduate Hospital last month it had attained an enormous size. The diagnosis of an ovarian cyst was easily made, and operation was necessitated by the dangerous symptoms of pressure, etc. Dr. Bullard cut down on the tumor and drew off the contents. There were in all 67 pounds of it, chiefly albuminous. One sac connected with the cyst contained a quart of colloidal matter and several small ones contained dark grumous fluid. The solid part of the tumor weighed

seven and a half pounds. Both ovaries were diseased and it was necessary to remove all the uterine appendages. The stump was secured to the incision in the abdominal walls, not with pins, but with silver sutures. By this means the abdominal cavity is closed and the stump left open for treatment. Dr. Bullard is a brilliant surgeon, rapid and sure, and the operation was not a long one considering its gravity. The patient rallied well, with little fever. A week later, when the wound was dressed, a mural abscess of considerable size was found, connecting with the sloughing pedicle. Treated with thorough antiseptics, however, it rapidly improved and the patient is now recovering.

March 31, Dr. A. P. Dudley, of the Post-Graduate and Women's Hospitals, operated at the former place for left pyosalpinx and pelvic abscess. The patient was a domestic, 31 years old, a widow with no children, having had one miscarriage two years ago. The latter was followed by an illness lasting six months, during which pus flowed from the rectum. There was a history of repeated pelvic abscess, from which the woman was also suffering on her entrance into the Hospital. Dr. Dudley performed laparotomy, removing both tubes and ovaries, which were diseased, curetting the walls of the abscess, breaking up the numerous adhesions, and stitching the rectum to the abscess walls. The result was a rapid and complete recovery. Dr. Dudley has his own way of closing the abdominal incision, using, instead of silver wire, three rows of catgut stitches. First he unites the peritoneum and lets it drop; next the fascia, the seam of which he includes in the next sutures which take in the abdominal muscles and integument.

Dr. A. F. Currier, of the Post-Graduate Hospital and School, performed an operation for lacerated perineum and rectocele, a few weeks ago, under cocaine. The patient was an American, 36 years old. She menstruated at 13, married at 14, her husband dying two years later. At her first menstruation she had a severe cold, which was followed by amenorrhœa for four months. At 15 she aborted with twins, and at 16 gave birth to a child weighing sixteen pounds. The labor was instrumental, long and difficult, and was followed by an illness lasting five months. She was remarried two years ago, and has since aborted twice. Three weeks before operation she was troubled with incontinence. Physical examination revealed extensive laceration of the cervix

anteriorly and posteriorly, cystocele, rectocele and lacerated perineum. Dr. Currier first operated for the lacerated cervix and cystocele, suturing the former with silver wire and the latter with catgut. The patient bore ether badly, and at the second operation for lacerated perineum and rectocele she had severe bronchitis, which contraindicated ether. Accordingly the double operation was done under cocaine, and very successfully, the patient experiencing little pain.

Dr. L. A. Stimson, at a Bellevue clinic, operated on a case of spina bifida. The patient was a year and a half old, the son of Italian parents. He was born with a tumor the size of a walnut over the sacral region. It gradually increased in size until, at the time of the operation, it was as large as a double fist and had a broad base. The diagnosis lay between a cystic tumor and spina bifida, with indications favoring the former. It was aspirated and then a depression could be felt communicating with the spinal canal, which settled the question. At the aspiration ten ounces of clear fluid were withdrawn. The sac immediately refilled and the child grew weaker. It was decided to dissect out the sac and ligate it, hoping to save the child's life. He was given ether and an attempt made at dissection. The sac was so adherent, however, and the child took ether so badly that the operation had to be abandoned for the time. April 22, Dr. Stimson, by operating very rapidly, succeeded in getting rid of the tumor and bringing the child safely out from under the influence of the ether. An incision was made directly down through the sac wall and the sac emptied. The membranes of the cord and the cord itself in part protruded through the opening in the spinal canal, and numerous filaments were attached to the walls of the sac. These, with the terminal end of the cord, were all ligated, the inner part of the sac was cut away, the hæmorrhage was stopped, an elliptical piece of skin was removed, and by these means the sides of the collapsed tumor were nicely brought together and sutured with silk. A drainage tube was inserted at the lower angle and an ordinary antiseptic bandage applied. The child suffered from shock, but stimulation brought him around and left him in fair condition. The wound did nicely, primary union being obtained throughout. Meningitis, however, was developed; there was a temperature of 104°, projectile vomiting, rigidity of the neck, etc. At latest accounts he was doing well under

bichloride of mercury internally and cold tubes to the spine externally.

At his clinic, April 15, Dr. Stimson exhibited a case of extensive necrosis of the tibia, upon which Dr. Gwyer operated for him. The patient, a boy thirteen years of age, had slipped on an orange peel nine months before, striking his right leg on the pavement. This accident was followed by fever, swelling, and a discharge. Since then he has been unable to walk upon it. There was enlargement throughout, a sequestrum involving a large part if not all of the tibia being evidently present. There were congestion and chronic inflammation, and the whole leg was literally honeycombed with sinuses. An incision was made over the whole length of the shaft of the tibia, and the periosteum raised, leaving the involucrum bare. This was chiselled away in front and several large and many small sequestra removed. These were easily loosened, being enclosed in pulpy granulation tissue and *débris* with some newly formed bone. The whole of the shaft was necrotic, and below extended to the epiphyseal line, and perhaps involving the epiphysis itself. However, it was thought best not to interfere with it. The involucrum extended entirely around the bone, and with the exception of what was chiselled away in front, it was left undisturbed. The pulpy tissues of the sinuses were scraped out and the cavity packed with bunches of catgut, drainage being obtained from the sinuses near the lower angle. Silk sutures were put in at each end and supporting sutures in the centre. Over this a dressing of curled hair soaked in bichloride of mercury was applied.

The operation was a long one but the boy recovered from the ether well and is doing nicely. This hair dressing is a new thing that promises well. It is aseptic, light, comfortable, and furnishes perfect absorption and drainage; and, where pressure is wanted, as in fractures, it is exceptionally good as it equalizes the pressure.

The treatment of phthisis by the inhalation of hot air apparently is not a success in Bellevue. It is being quite extensively tried, air at a temperature of 450° being used. Although the visiting physician is not ready to make a report of his experience it is understood that the patients have not yet shown much if any improvement.

The operation of grafting a rabbit's cornea on to the eye of a man was successfully performed here last week. The details will appear in the REPORTER very soon.

The following is the prescription for an expectorant mixture much used in Bellevue Hospital:

R Ammonii Carbonatis gr. xxxij
 Extr. Senegæ Fluidi, aa f 3 j
 Extr. Scillæ Fluidi f 3 ij
 Tr. Opii Camph. f 3 iv
 Aquæ f 3 iv
 Syr. Tolutan. q. s. ad f 3 iv
 Dissolve and mix. Dose, a teaspoonful.

As a gargle for inflammatory troubles, Dr. Abraham Jacobi's "Special" is used:

R Potassi Chloratis gr. lxxx
 Tr. Ferri Chloridi m. clx
 Glycerini f 3 ij
 Aquæ q. s. ad f 3 viij

Dissolve and mix. Used as a gargle and internally in doses of half ounce.

PERISCOPE.

Hysterical Monoplegia in a Man.

At the meeting of the New York Academy of Medicine, March 11, 1889, Dr. Robert Abbe presented a young man, about twenty-five years old, in whom hysterical monoplegia was developed, the mild clonic spasm and its occurrence in a male patient making the case an uncommon one. This patient had fallen and struck on his back on a slippery pavement, had felt a sharp pain, and had at once lost full power to use the right leg. From this time on the right limb had been affected with anæsthesia, the gait had been irregular, and if the patient lay down and moved the limb about, a clonic spasm appearing like an exaggerated tremor was at once produced. Any general effort produced violent trembling due to clonic spasm in the muscles of the neck and abdomen, and partial stoppage of respiration. Exquisite sensitiveness was complained of when a portion of the spinal column opposite the first dorsal vertebra was pressed with a piece of ice. However, the anæsthesia was diminishing, and when ether had been given, though the affected limb had remained weak while the patient was going under its influence, as he was coming out it had been used with the utmost vigor. It had become quite evident that the case was largely hysterical in its nature, when it was also found that by suggestion the patient could be made to complain of the same pain in any other portion of the spinal column touched with the ice. On being forced to run along the wards quite rapidly, he had used the affected limb freely and had not stumbled. Mild clonus, said Dr. Abbe, is a rare affection,

and has not been classified among any of the diseases of the nervous system. The monoplegia does not suggest a spinal paralysis. The condition present is probably an hysterical neurosis, perhaps due to shock, and existing without the patient's being conscious that his own ideas are so largely the cause of it.—*New York Med. Journal*, April 20, 1889.

Treatment of Certain Cases of Chronic Uræmia.

At the meeting of the Medical Society of London, April 8, 1889, Dr. Stephen Mackenzie read a paper on the treatment of certain cases of chronic uræmia. He regards uræmia as a poisoning of the nervous system—a toxæmia; and as the poison is developed within the body of the patient, it is an autotoxæmia. References were made to the writings of Grainger Stewart, Dickinson, and Carter, and more especially to the researches of Bouchard, who had described seven toxic elements in the blood in uræmia. The principles of the treatment of uræmia he declared to be three: (1) the elimination of the poisons; (2) the counteraction of the poisons; (3) the prevention of the retention of further poisons. After discussing the first and last principles of treatment, which should always be employed, he proceeded to point out that the value of morphine is to fulfil the second indication. The author next discussed the nature of uræmic dyspnœa, headache, and convulsions, and attributed the beneficial effects of morphine to its freeing the blood-vessels from the spasm induced by the poison in the blood. He referred to the writings of Loomis and his followers, and to cases recently recorded by Mr. Alfred Grace, in which morphine had been administered in as large quantities as from one-half to one whole grain for a dose, by hypodermic injections, with the best results. He concluded by saying he thought enough evidence had been brought forward to show that morphine deserves further trial in uræmia. He does not recommend its indiscriminate use, and in the light of the asserted susceptibility of patients with disease of the kidneys to the toxic effects of opium, it should be given with eyes open to its possible danger. There can, however, be no doubt as to its immediate good in suitable cases, and it is probable more lasting good will result in cases of a curable kind.—*British Med. Journal*, April 13, 1889.

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The Editor will be glad to get medical news, but it is important that brevity and actual interest shall characterize communications intended for publication.

THE CHARGE AGAINST THE PHILADELPHIA HOSPITAL.

The last issue of the REPORTER contained an editorial describing the charges brought against certain nurses, or helpers, in the Insane Department of the Philadelphia Hospital, by a newspaper reporter, who had feigned insanity in order to investigate the management of the institution. These charges have been met in a manner highly creditable to the Board of Charities and Correction, which governs the hospital. The President of the Board acting for it, at once addressed an official communication to the District Attorney, reciting the published accusation and asking him to make such an investigation as shall discover in how far they may be true, and to take steps

to bring to justice any person who may be shown to have been guilty of cruelty to the inmates. He has also taken steps to have the charges formulated in such a way as to bring them formally before the District Attorney for official notice.

In doing this the Board of Charities and Correction has taken the best step possible to strengthen the confidence reposed in it by the community. It is rather a new thing, in the history of institutions like the Philadelphia Hospital, to invite a thorough judicial investigation of charges made against them. The usual course is to deny the charges and to endeavor to screen those individuals who are directly implicated by them. In deviating from this course the authorities of the hospital have disarmed captious criticism, and shown that they know how to concede what is proper to an excited public sentiment, while awaiting with patience a vindication which shall be without favor or a correction which shall be without prejudice. Whatever the issue may be, as to the details of the charges of cruelty on the part of a few subordinates, the community will be sure to approve the wise and just attitude assumed by those who are indirectly involved in them; and the reputation for humane and skilful management, which the Philadelphia Hospital has of late years come to enjoy, will, we have no doubt, be enhanced by the manner in which the present exigency has been met.

A CASE OF HYSTERO-EPILEPSY IN A MAN.

On account of the comparative rarity of hysteria in men and especially of its severer forms much interest attaches to the history of a case reported by Drs. Andrée and Knoblauch in the *Berliner klin. Wochenschrift*, March 11, 1889. The case was observed at the garrison hospital at Karlsruhe. Instantaneous photographs were made during the several periods of the spasms and from them engravings which illustrate the paper. The following is an outline of the

history of the case. A grenadier, twenty-three years of age, never having had any nervous disease or hereditary tendency of this sort, after great mental agitation, combined with great bodily exertion, was suddenly taken ill with violent spasms, and was brought to the hospital in a state of unconsciousness, on March 4, 1888. On examination in the hospital he was found to be a strongly built, very muscular and well nourished man; all the organs were normal, the pulse was full, bounding and regular, with about ninety-six beats per minute. The respirations were quiet and deep, and somewhat accelerated. There was no contraction of the muscles or wounding of the tongue or lips. A short time after being placed in a bed, the man had an attack of spasms lasting four minutes, succeeded during the same day by similar attacks. From the fifth to the seventh of March the patient had from six to nine attacks of spasms daily, of varying duration and intensity. From this time on, the attacks diminished in frequency, but increased in duration and in intensity, until finally there was developed the typical attack of "*grande hystérie*," or hystero-epilepsy, with the three well marked stages described by Charcot, Richer and others. Always before an attack began, the patient had sensations on the breast, neck and the head, similar to the *aura epileptica*. A most remarkable feature of the case was the fact that the lightest touch upon the right nipple produced the hysterical aura, and this was followed by a typical attack when the nipple was pressed somewhat more firmly or when the skin was rubbed with the finger in a direction from the nipple upward toward the right side of the neck. On the other hand it was possible to suppress the attack in all its periods, and to put the patient in a state of a profound sleep, by rubbing the skin in the opposite direction—from the neck to the right nipple. An attack could not be produced by acting on the testicle, but it was possible to suppress one for a short time by strong pressure

on one or both testicles, and also, in like manner, by strong pressure on the abdominal regions on both sides which corresponded with the position of the ovaries in women.

After the fifth day of the patient's stay at the hospital the frequency of the attacks diminished rapidly, and when they had failed to appear for six weeks, he was discharged. After two weeks he had a new attack lasting fifteen minutes. A final attack, lasting five minutes occurred five weeks afterward. During the last five months he had not had any more attacks, but was very well and able to work; and of late he had not had any evidence of having had a nervous disease.

This remarkable case is of great interest, as it illustrates the strange character of grave hysteria, to which the name is etymologically as inappropriate in women as in men. The possibility of developing an attack by pressing the nipple of one side or rubbing the skin of the breast in one direction, and of curtailing the attacks by rubbing the same skin in an opposite direction or pressing upon the testicles is as curious as any of the phenomena observed in hysteria in women. More curious still is the fact that pressure upon the abdomen, over the region corresponding to that of the ovaries in women, should have produced an effect similar to that observed when the ovaries themselves are pressed in hysterical women. This may be partly accounted for upon the theory that the pressure caused a sensation in the spermatic cord which was referred to the testicles, but the fact is none the less interesting.

MILK AND THE PUBLIC HEALTH.

The relation of adulterated, fermented, putrified or infected milk to the public health is a question which has assumed greater importance with the increase of knowledge of the etiology of disease. Adulteration of so necessary a food product as milk needs only to be mentioned to be

condemned. It is now generally admitted that milk which has undergone fermentative and putrefactive changes, is a very frequent cause of diarrhoea in artificially-fed infants. The causative relation between certain products of the putrefaction of milk and other albumenoid substances and choleraic attacks in those ingesting them—known as picnic ice-cream poisoning, stale cream-puff poisoning, etc.—has been demonstrated, and largely through the investigations of Prof. Vaughan. The occasional dependence of epidemics, especially of scarlet fever, and other contagious diseases, upon infected milk is an accepted fact. That milk from tuberculous animals may prove a source of infection has long been a prevalent belief in the profession. This belief finds expression in the axiom that a tuberculous mother should not nurse her offspring. At the French Congress for the Study of Tuberculosis, held in 1888, the opinion was strongly supported that milk from tuberculous cows is a frequent source of infection. A case in point is that of Demme, of Berne, which was mentioned in the *REPORTER*, August 18, 1888. In this case an infant artificially-fed, and not hereditarily disposed to phthisis, died of tuberculosis of the mesenteric glands, as shown by the autopsy. The cow from which milk for the infant was obtained was killed and tubercle and bacilli were found in abundance in the left lung and pleura. Bacilli were also found in milk expressed from the deepest parts of the mammary gland. The statement that the relation between bad milk and the public health is an important one is seen to rest upon a solid basis. Unquestionably, however, the question of bad milk as a cause of disease and death among infants is relatively so great as to overtop the other evil influences arising from this cause.

The methods of milk supply in general use in Philadelphia and other cities do not protect the consumer against bad milk; in fact, the incentive to the honest producer and dealer is to adulterate the milk, because

he is in close competition with dishonest dealers who do. A number of methods have been suggested and tried to protect the consumer and the honest dealer. Systematic inspection has done much to improve the milk supply of New York, among other cities. It is conceded that proper inspection of milk to detect adulteration, together with stringent laws for the punishment of the adulterators, are powerful factors in ensuring pure milk to the consumer. But, however much the accomplishment of this end is to be desired, it really solves but a part of the problem. Milk which has undergone putrefactive changes, or which contains the contagium of scarlatina or the bacillus of tuberculosis is far more to be dreaded than milk which contains an undue percentage of water.

The method of delivering milk in sealed bottles or glass cans is advocated and practised quite extensively. In Philadelphia the method has been employed by Dr. J. Cheston Morris and others. In 1884, Dr. Morris read a paper before the Social Science Association of Philadelphia, in which he advocated the general adoption of this method of milk delivery. It is claimed for the method that since the seal is placed upon the bottle at the dairy, the consumer is protected against the dishonest retailer; and since the producer's name appears upon each bottle, the demand for his brand depends solely upon its quality. Hence the producer has a constant incentive to furnish a good quality of milk. On the other hand, it is urged that the multiplicity of milk vessels increases the probability of the use of unclean vessels; and that the liability of milk to be a means of propagating the infectious diseases is increased by the method, since the vessels are left at houses indiscriminately, whether their inmates are suffering from contagious diseases or not; also that no protection is afforded against tuberculosis.

Prof. Vaughan, so well known for his researches in connection with the putrefac-

tion of milk, has formulated certain rules which, if followed, would ensure a supply of good milk; though the spread of the contagious diseases and tuberculosis by means of milk might not be prevented. These rules comprise the exclusion of diseased cattle from dairies, provision for the sanitary condition of stables, exclusion of improper food, and cleanliness of the cattle. In this way good milk is secured. In order that it may be good when delivered to the consumer, it is to be strained in perfectly sweet and clean cans, and chilled by being placed in running water or ice water until its temperature is at or below 65° F. During this time the milk must be exposed to the air; only refrigerator cars must be used in its transshipment; and its temperature must never be above 65° F. when received by the consumer. To ensure the results sought by this method necessitates a large force of inspectors.

With a supply of whole, unfermented milk ensured the consumer, the problem of preventing putrefactive changes, and of destroying the germs of tuberculosis or the contagium of the exanthemata is probably solved by sterilization with heat. The usual method of boiling milk in open vessels probably destroys any germs it contains—the germs of disease as well as those of fermentation; but the method is open to objections. It is necessary to pour the milk into other vessels, thus it is freely exposed to the air and fermentation is favored. Practically, Caillé has found that “store-milk,” after being boiled in an open vessel, when placed in an open dish in an ice-box “turned” after eighteen hours; and that good “bottle-milk” treated in the same way “turned” in twenty-six hours; and that the same milk when left standing in an open room with a temperature of 75° F., had a distinct sour taste and smell after from eight to fifteen hours. Milk boiled under pressure in small bottles for thirty minutes and left in the bottles remained good eighteen days. The very superior results obtained by boiling

the milk under pressure would indicate this as the most desirable method.

The method followed and the apparatus used by Caillé were those of Soxhlet. The method is intended more especially for the sterilization of milk for infant feeding in private families. The apparatus is very simple and inexpensive. Practically the method consists in putting milk into five or six ounce bottles, into which a perforated rubber cork is inserted. The bottles are put in a water bath and the water raised to the boiling point. Glass stoppers are then inserted in the perforated rubber corks and the boiling process is continued for twenty minutes. This method and apparatus are largely used in Munich and Southern Germany, and to a certain extent in this country.

It appears that the principle involved in this method is so simple that it could easily be applied to the milk supply of a city. In discussing the method of supplying milk in sealed bottles, it was found that the two objections to the method were the greater probability of milk contamination from unclean vessels, and the danger of spreading contagious diseases from house to house. These objections would be overcome by boiling the bottles after cleaning them; and sterilizing the milk in the bottles before sealing them. Milk so prepared could not cause diarrhoea or cholera infantum, or be the means of spreading tuberculosis or any one of the infectious diseases.

A COUNTY SOCIETY SUSTAINED IN COURT.

It is interesting to note that judgment has lately been entered on a final order of Judge Ingraham of the Supreme Court of New York, sustaining the Medical Society of the County of New York in expelling from membership Dr. James O'Reilly, who advertises a so-called “Woman's Infirmary and Maternity Home,” in which the special object seems to be to care for unmarried pregnant women.

In the circulars issued when this institution was first started there were intimations which might easily be construed into a willingness to relieve mothers of illegitimate children of all the responsibilities of their motherhood, as well as to furnish them a place of concealment during the latter part of their pregnancy and their lying-in period. These intimations, and the general methods of Dr. O'Reilly were calculated to arouse suspicion in regard to the motives and intentions of his institution, which posed as a charity, and the New York County Society expelled him, for a violation of the code of ethics—as we understand the case.

As the members of the profession in the city in which Dr. O'Reilly lives and has his "Infirmity" are best fitted to judge of the propriety of conduct which at this distance seems open to suspicion, we have no doubt that he got but his deserts in being expelled from the County Society, and are glad to find that the Society's action is now fully sustained by a judicial decision.

ANOTHER MURDER BY AN INSANE MAN.—A dispatch from Chicago to the daily papers states that a young man, twenty-six years of age, became suddenly insane while in bed, on May 5. After a desperate struggle with his wife, he took their babe from its crib and dashed its brains out against the wall. He then got a butcher knife and tried to kill his wife, but she escaped to the street. The man then cut his own throat with the knife, but did not kill himself. He was secured and taken to the hospital.

It is possible that the man in question had been insane for some time, but had been kept at home by his affectionate but misguided family. The case points to the importance of putting persons with certain forms of mental derangement under proper supervision and, if necessary, restraint at the earliest possible period. This is best as regards the patient's recovery, and is the only way to prevent such horrible acts as are illustrated in the present instance.

BOOK REVIEWS.

[Any book reviewed in these columns may be obtained upon receipt of price, from the office of the REPORTER.]

ELECTRICITY IN THE DISEASES OF WOMEN, WITH SPECIAL REFERENCE TO THE APPLICATION OF STRONG CURRENTS. BY G. BETTON MASSEY, M.D., Physician to the Nervous Dept. of Howard Hospital, etc. Small 8vo, pp. viii, 210. Philadelphia and London: F. A. Davis, 1888. Price, \$1.50.

The appearance of Dr. Massey's book at this time is opportune, and, unlike many books, we believe it will fill a "want," felt by the profession, which has been produced by the publication of the researches and results of Apostoli, Engelmann and others.

The introductory part of the work consists of a concise presentation of the laws of electricity, together with a description of the electrical apparatus necessary for the application of this agent to the treatment of certain diseases peculiar to women. Then follows a systematic consideration of the uses of electricity in gynecology. The author's claims are in general moderate, and fully justified by the present status of the subject. His moderation in statement is less apparent when he strays slightly from the domain of electricity into that of surgery proper. This is perhaps to be expected from one who has studied the subject from the standpoint of the neurologist and electrician rather than from that of the gynecologist.

It is especially pleasing to note that the author regards the presence of pus in the pelvis as a positive contra-indication to the use of electricity.

As already stated we believe the book will fill a "want," and owing to its scientific character and moderate claims it can be recommended to all who treat the diseases of women.

PAMPHLET NOTICES.

[Any reader of the REPORTER who desires a copy of a pamphlet noticed in these columns will doubtless secure it by addressing the author with a request stating where the notice was seen and enclosing a postage-stamp.]

265. **REPRESSION OF MENSTRUATION AS A CURATIVE AGENT IN GYNECOLOGY.** BY EUGENE C. GEHRUNG, M.D., St. Louis, Mo. From the *American Journal of Obstetrics*, November, 1888. 12 pages.

266. **FOOD VERSUS BACILLI IN CONSUMPTION.** BY EPHRAIM CUTTER, M.D., New York. From the *Virginia Medical Monthly*, December, 1888. 24 pages.

265. Dr. Gehrung, after a short consideration of the functions of menstruation in general, advances and defends the rather startling view that it may be advantageously interrupted by artificial means—vaginal tampons—whenever the flow seems to be greater than a woman can afford to lose. He believes that a flow of from two to four ounces of blood should be regarded as the maximum, and that the loss of quantities in excess of this is injurious to health.

266. It is not pleasant to criticize persons whose motives may be excellent; but how anybody can read patiently the stuff published by Dr. Cutter, we cannot see. The pamphlet before us is like all the rest of his productions which we have seen, and commends itself as little to our approval.

CORRESPONDENCE.

Catarrh of the Middle Ear.

TO THE EDITOR.

Sir: For the past two years we have had numerous cases of acute inflammation of the middle ear, of a catarrhal nature. So frequently have they appeared that they may justly be considered epidemic. Some cases are mild and are relieved after only two or three days of "ear ache," while others are very severe, having a destruction of the tympanum; the chain of bones, and deeper structures, with loss of hearing, leaving an offensive discharge from the ear which continues for months. When there is extensive inflammation in the tympanic cavity there are excruciating pains. In one case of four days standing, symptoms of compression of the brain appeared, after which the patient survived only twenty-four hours. In another case an opening was made above the mastoid process, from which there was a discharge of foetid pus for several months.

In some of these cases the inflammation seemed to start in the ear, and in others it travelled up the Eustachian tube developing into intense severity after reaching the tympanic cavity. Those attacked were of various ages, from one year to middle life. I have not seen one above fifty years of age. The most severe cases were in adult males.

Catarrhs have not been more prevalent during this period of time than in former years, but this particular form seems to be more prevalent.

Diphtheria has prevailed to some extent, but in not one of these cases of diphtheria has there been an extension into the tympanic cavity. I am a firm believer in the germ origin of diphtheria—but am not quite ready to attribute this epidemic to any form of micro-organisms. I believe the cause to be exposure to extreme cold winds; but I cannot explain why we should have such an epidemic, for one does not always follow such severe cold winds when

These cases are seemingly cut short by vigorous and persistent use of anodynes and sedatives—remedies which in diphtheria would be extremely pernicious. Opium alone does not control the pain; I usually combine it with gelsemium, and bromide of potass.

Yours truly,

JOHN M. CURRIER, M.D.

Newport, Vermont,
May 6, 1889.

NOTES AND COMMENTS.

Useful Formulæ in Skin Diseases.

Dr. M. J. Epstein gives the following formulæ as in use in the service of Dr. W. A. Hardaway, at the skin clinic of the St. Louis Post-Graduate School of Medicine (*St. Louis Polyclinic*, May, 1889):

R Unguenti vaselini plumbici . . . ʒiv
S Spread on cotton cloth.

One of the most universally applicable and valuable ointments in eczema is the diachylon ointment of Hebra; but owing to the difficulty of preparing it after the original formula, it is now generally made by melting together equal parts of vaseline and lead plaster. It should be neatly and evenly spread on strips of cotton cloth, and fastened to the parts with a roller bandage.

R Ung. picis liquidæ . . . ʒss
Ung. aquæ rosæ . . . ʒi
Zinci oxidi . . . ʒi

M. S Spread on lint.

This is of especial value in the eczema (chronic?) of children.

R Ol. rusci . . . fʒi-ii
Ung. aquæ rosæ . . . ʒi

M. S. Rub in thoroughly.

Useful in squamous eczema and also sometimes in psoriasis.

R Hydrargyri ammoniati . . . ʒss
Liq. picis alkalini . . . fʒi
Ung. aq. rosæ . . . ʒi

M. S. Local use.

Employed in infiltrated eczema and in psoriasis of the scalp. It must not be used over too large a surface.

R Acidi salicylici . . . ʒi
Sulphuris præcipitati . . . ʒi
Vaselini . . . ʒi
Ol. rosæ . . . q. s.

M. S. Rub in thoroughly.

The range of application of this preparation is very wide, viz: seborrhœa and scaly eczema of scalp, tinea versicolor, keratosis senilis, and lupus erythematosus.

R Emplastri plumbi . . . ʒxxv
Pulv. saponis . . . ʒiv
Aquæ . . . q. s.
Vaselini . . . ʒv
Camphoræ . . . gr. xx
Acidi salicylici . . . ʒv

M. S. Spread on lint.

This is a modification of Pick's compound salicylated soap plaster. It is much prescribed in the clinic for infiltrated eczema, especially of the hands and feet, and is now largely used in place of the more expensive Hamburg plasters of a certain kind. The

amount of salicylic acid may be varied to suit the case.

R Chrysarobini gr. xl
Acidi salicylici gr. xl
Traumaticini f 3 i

M. S. Apply with a camel's hair pencil.

This combination affords the best results in psoriasis. After thorough removal of the scales, it should be painted directly on the patches, being careful not to put it on the face, or about the genitals. As is well known, chrysarobin occasions considerable dermatitis, and its effects must be watched.

R Quininae sulphatis gr. x
Spir. myrciae f 3 iii
Glycerinae f 3 i
Sodii chloridi ʒ ii
Aque q. s. ad f 3 viii

M. S. Local use.

There are hundreds of so-called hair tonics, containing more or less of these ingredients, but the one here given is one of the most satisfactory of its kind.

R Acidi salicylici ʒ ss
Zinci oxidi,
Amyli aa ʒ ii
Vasellini ʒ ii

M.

The formula above constitutes the well-known Lassar's paste. It may be applied on strips of cloth, or in chronic scaly patches directly rubbed in with the finger. It is of value in many varieties of eczema and intertrigo.

R Zinci oxidi ʒ i
Glycerini,
Mucilag. acaciae aa f 3 ii

M. Apply with a brush.

In extensive patches of eczema this paste is very agreeable. If itching is severe, one per cent. of carbolic acid may be added.

The Death of Father Damien.

Father Damien, the heroic Belgian priest who devoted his life to the service of the leper colony in the Sandwich Islands, fell a victim to the disease on April 10. The readers of the REPORTER will recollect that mention was made of his desperate condition in the issue of January 26, and a brief statement of his self-denying labors in the issue of February 16, of this year. Father Damien had resided among the lepers for sixteen years when death came to his relief, and he had seen the population of Molokai renew itself three times, as the average duration of a leper's life is about seven years. Years ago, he became afflicted with leprosy himself, and for a long time before his death was a painful sufferer from the scourge.

The latest letters from the leper colony stated that his health was so broken that his death was likely to occur at any time. Father Damien had for assistants two men as heroic as himself. One of these was an Irishman named Walsh. He was a mason by trade, and had been a soldier in the English army. Walsh reached Honolulu in broken health and reduced circumstances just at the time a superintendent was needed to keep the colony in order. He accepted the position, with the result that he is a leper himself to-day and pining for relief in death. Father Damien's other helper was the Rev. M. Conrardy, a Catholic priest formerly connected with the Archdiocese of Oregon, who voluntarily went to Molokai about two years ago to become Father Damien's assistant.

Dr. W. W. Keen and the Woman's Medical College.

At a stated meeting of the Faculty of the Woman's Medical College of Pennsylvania, held May 18, 1889, the following resolution was adopted:

"Resolved, that the Faculty of the Woman's Medical College of Pennsylvania have learned with deep regret of the resignation by Prof. W. W. Keen, of the Chair of Surgery in this College. Dr. Keen's enthusiasm as a teacher in a department for which he is eminently qualified, and his unhesitating surrender of time in doing a generous share of Faculty work, have made his connection with the College conspicuously valuable and helpful.

The Faculty also desire to express their sense of personal loss in this severance of relations which have ever been most harmonious and agreeable, and to proffer their congratulations to Dr. Keen in view of his new appointment, with warmest wishes for success and happiness in his future work."

CLARA MARSHALL,
Dean of the Faculty.

—Roger and Gaume have made a report to the Biological Society of Paris upon experiments concerning the toxicity of the urine of pneumonia patients. During the febrile period they state that the urine is two or three times less poisonous than otherwise; with the crisis it reaches its least degree of toxicity, while after the crisis for two or three days it is considerably increased. They think the cause of the toxicity is an unknown poison, perhaps a substance produced by bacteria.

NEWS.

—The Legislature of Tennessee has passed a bill to regulate the practice of medicine in that State.

—The German Ophthalmological Society will meet at Heidelberg from September 13 to 15, 1889.

—An International Congress of Otology and Laryngology will be held in Paris from September 16 to 21, 1889.

—The annual meeting of the American Surgical Association was held in Washington, D. C., May 15, 16 and 17, 1889.

—Dr. William A. Douglass, Emeritus Professor of Anatomy in the Cooper Medical College, died in San Francisco, Cal., March 26.

—The *Nashville Journal of Medicine and Surgery*, April, 1889, announces that the plans for the new city hospital have been submitted, and that bids for the erection of the building will be opened at an early day.

—Dr. Duane B. Simmons, who has done so much for medical education in Japan, died there recently. The *Sei-I-Kwai Medical Journal*, April, 1889, contains a number of appreciative notices of his life and services.

—The Eleventh Annual Congress of the American Laryngological Association will meet at the Arlington House, Washington, D. C., May 30, 31 and June 1. A cordial invitation to attend the meeting is given to members of the medical profession.

—Under date of April 27, 1889, it is reported from Japan that a terrible disease, resembling malignant typhus, has broken out in Anagawa Ken. Of 64 cases, 40 ended fatally within 24 hours. The doctors attribute the disease to the use of bad rice.

—Dr. Charles E. West, of Brooklyn, who began teaching when only 18 years old, is now about to retire at the age of 80 years. For the last fifty years he has been connected with three schools, of one of which, the Brooklyn Heights Seminary, he is now President.

—Willard Perkins, a restaurateur, of Waterbury, Connecticut, died there on April 27, from congestion of the lungs and heart failure, attributed to excessive fat. He was born in Philadelphia, and at the age of 12 years weighed 250 pounds. At one time he weighed 452 pounds. Until he was 20 years of age he was exhibited throughout the country as "Billy Bates, the Philadelphia giant."

—A law to punish drunkenness went into effect in Minnesota on May 16. It provides that "whoever becomes intoxicated by voluntary drinking intoxicating liquors shall be deemed guilty of the crime of drunkenness, and, upon conviction thereof, shall be punished as follows: For the first offense, by a fine of not less than \$10, nor more than \$40, or by imprisonment for not less than ten, nor more than forty, days; for the second offense, by imprisonment for not less than thirty nor more than sixty days, or by a fine of not less than \$20 nor more than \$50; for the third and all subsequent offenses, by imprisonment of not less than sixty days nor more than ninety days."

HUMOR.

OUR NATIONAL NAVY should be rapidly doubled up with the Cramps working so persistently at it.—*Washington Critic*.

IF YOU FEEL mad when some rude person runs into you in the street, how must you feel when a locomotor ataxia?—*N. Y. Commercial Advertiser*.

JINGS.—"Chops is all broke up. The Sheriff has just seized his meat market." Jangs.—"Is that so? I saw him this morning, and I thought he looked as if he'd lost flesh."—*Lowell Citizen*.

A SUCCESSFUL AFFAIR.—Wife (to her husband, a physician)—"Did you stop at the Vancouver ball to-night, William?" Physician—"For a few minutes, my dear." Wife—"Did it seem to be a successful affair?" Physician—"Oh, yes; while I was there a young lady fell in a faint, and I prescribed for her. Here is her father's card."

WALT WHITMAN, it is related, was called upon the other day by a young man with a large manuscript, which the visitor exhibited, remarking "Mr. Whitman, I should like to read you my drama and get your opinion of its merits." "No; I thank you," responded the good gray poet, "I've been paralyzed once." So was the young man forthwith.—*Ledger*.

SYMPATHIZED WITH NATURE.—Granger.—"Doc, thar mus' be suthin' left whar ye pulled thet tooth for me, last week. It's ached ever sence." Dentist (examining the mouth).—"Nothing there, sir, but a vacuum." "How big?" "Why, about the size of a tooth, of course." "Wal' yank 'er out, Doc. I knowed suthin' was wrong. I've heerd that nacher obhors a vackeyum, an' dinged if I blame 'er, 'f she ever got one stuck inter her jaw."